[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2016-6693; Directorate Identifier 2015-SW-033-AD]

**RIN 2120-AA64** 

**Airworthiness Directives; Airbus Helicopters** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for Airbus Helicopters Model AS332C, AS332C1, AS332L1, AS332L2, and EC225LP helicopters. This proposed AD would require repetitive inspections of the intermediate gear box (IGB) fairing. This proposed AD is prompted by separation of the IGB fairing from the fairing gutter and subsequent interference with the drive shaft. The actions of this proposed AD are intended to prevent the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.
  - Fax: 202-493-2251.

- <u>Mail</u>: Send comments to the U.S. Department of Transportation, Docket
   Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
   Avenue SE, Washington, DC 20590-0001.
- <u>Hand Delivery</u>: Deliver to the "Mail" address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-6693; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, the European Aviation Safety Agency (EASA) AD, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

**FOR FURTHER INFORMATION CONTACT:** David Hatfield, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5116; email david.hatfield@faa.gov.

#### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

#### Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2015-0092, dated May 26, 2015, to correct an unsafe condition for Airbus Model AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters with certain part-numbered IGB fairings installed. EASA advises of occurrences involving separation of the angle section of the IGB fairing from the IGB fairing gutter, which caused interference with the tail rotor (T/R) inclined drive shaft.

EASA states that this condition, if not detected and corrected, could lead to failure of the T/R drive shaft, loss of the T/R drive, and consequent reduced control of the helicopter. To address this condition, EASA issued a series of ADs to require repetitive inspections of the IGB fairing and its attachment supports and other corrective actions. According to EASA, reports of cracks and separation of the gutter continued to occur. EASA superseded its previous ADs and issued AD No. 2011-0189-E, dated September 29, 2011, to require additional inspections of the IGB fairing and attachment supports.

After EASA issued AD No. 2011-0189-E, Airbus Helicopters developed a new IGB fairing, part number (P/N) 332A24-0322-00, which is a one-piece full composite part that integrates a gutter. EASA then superseded AD No. 2011-0189-E and issued AD No. 2015-0092, retaining the inspection requirements but requiring installation of the new composite IGB fairing as terminating action for the inspections.

#### **FAA's Determination**

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

#### **Related Service Information Under 1 CFR part 51**

We reviewed Airbus Helicopters Emergency Alert Service Bulletin (EASB), Revision 5, dated March 9, 2015, which is one document with three different identification numbers. EASB No. 53.01.47 is for Model AS332C, C1, L, L1, L2, and

military model B, B1, M, M1, and F1 helicopters. EASB No. 53.00.48 is for military Model AS532-series helicopters. EASB No. 53A001 is for Model EC225 LP and the military Model EC725AP helicopter. EASB Nos. 53.01.47 and 53A001 are proposed for incorporation by reference in this proposed AD. EASB No. 53.00.48 is not proposed for incorporation by reference in this proposed AD.

This service information specifies repetitive inspections of the IGB fairing, attachment supports, and fairing gutter. This service information also advises that IGB fairing P/Ns 332A24-0303-05XX, 332A24-0303-06XX, 332A08-1391-00, and 332A08-1391-01 are unfit for flight beginning December 1, 2017, and that these fairings should be replaced with a new composite fairing P/N 332A24-0322-00.

We also reviewed Airbus Helicopters Service Bulletin No. AS332-53.01.78, Revision 0, dated March 9, 2015, for FAA type-certificated Model AS332C, C1, L, L1, and L2 helicopters and military Model AS332B, B1, F1, M, and M1 helicopters, and Airbus Helicopter Service Bulletin No. EC225-53-041, Revision 0, dated March 9, 2015, for the Model EC225LP helicopter. The service information specifies replacing each IGB fairing with a newly designed fairing. Airbus Helicopters identifies replacement of the IGB fairing under these service instructions as Modification 0726819.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Proposed AD Requirements**

This proposed AD would require repetitively inspecting the IGB fairing and attachment supports for a crack. If there is a crack in an attachment support, this proposed AD would require replacing the attachment support. If there is a crack in the fairing, this proposed AD would require replacing the IGB fairing with a composite fairing P/N 332A24-0322-00.

For helicopters with IGB fairing P/N 332A24-0303-05XX or P/N 332A24-0303-06XX, this proposed AD would also require repetitively inspecting the fairing gutter for a crack. If there is a crack in the fairing gutter, this proposed AD would require inspecting for interference and separation.

This proposed AD would also require replacing the IGB fairing with IGB fairing P/N 332A24-0322-00 within 150 hours TIS, if not previously replaced as the result of the repetitive inspections. Replacing the IGB fairing with IGB fairing P/N 332A24-0322-00 would be terminating action for the repetitive inspections.

Lastly, this proposed AD would prohibit installing an IGB fairing P/N 332A24-0303-05XX, P/N 332A24-0303-06XX, P/N 332A08-1391-00, or P/N 332A08-1391-01 on any helicopter.

### Differences between this Proposed AD and the EASA AD

The EASA AD requires replacing the IGB fairing with the composite fairing within 31 months. This proposed AD would require this replacement within 150 hours TIS.

### **Costs of Compliance**

We estimate that this proposed AD would affect 11 helicopters of U.S. Registry and that labor costs average \$85 per work-hour. Based on these estimates, we expect the following costs:

- Visually inspecting each IGB fairing and the left- and right-hand attachment supports for a crack would require a 0.5 work-hour for a total cost of \$43 per helicopter and \$473 for the U.S. fleet, per inspection cycle.
- Replacing the IGB fairing would require 2 work hours and parts would cost \$2,600, for a total cost of \$2,770 per helicopter and \$30,470 for the U.S. fleet.
- Replacing the attachment supports would require 2 work hours and parts would cost \$1,100 for a total cost of \$1,270 per helicopter.
- Visually inspecting for a crack in the fairing gutter would require 0.5 work hour for a total cost of about \$43 per helicopter.
- Inspecting for interference and separation of the fairing gutter would require
   0.5 work hour for a total cost of \$43 per helicopter.
- Replacing the inclined drive shaft tube would require 2 work hours and parts would cost \$18,399, for a total cost of \$18,569 per helicopter.
- Replacing a hydraulic pipe would require 2 work hours and parts would cost
   \$1,322, for a total cost of \$1,492 per helicopter.
- Repairing the flight control assembly would require 2 work hours and parts
   would cost \$484, for a total cost of \$654 per helicopter.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- Is not a "significant rule" under the DOT Regulatory Policies and Procedures
   (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Airbus Helicopters:** Docket No. FAA-2016-6693; Directorate Identifier 2015-SW-033-AD.

#### (a) Applicability

This AD applies to Model AS332C, AS332C1, AS332L1, AS332L1, AS332L2, and EC225LP helicopters with an intermediate gear box (IGB) fairing part number (P/N)

332A24-0303-05XX, 332A24-0303-06XX, 332A08-1391-00, or 332A08-1391-01 installed, where "XX" is any two alphanumeric characters, certificated in any category.

#### (b) Unsafe Condition

This AD defines the unsafe condition as detachment of the angle section of an IGB and subsequent interference between an IGB fairing and tail rotor inclined drive shaft. This condition could result in failure of a tail rotor drive shaft, loss of the tail rotor drive, and subsequent loss of control of the helicopter.

#### (c) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

### (d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

#### (e) Required Actions

- (1) Within 15 hours time-in-service (TIS) and thereafter at intervals not to exceed 15 hours TIS, visually inspect the IGB fairing and the left- and right-hand attachment supports for a crack as shown in Figure 2 of Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 53.01.47, Revision 5, dated March 5, 2015 (EASB No. 53.01.47) or EASB No. 53A001, Revision 5, dated March 5, 2015 (EASB No. 53A001), as appropriate for your model helicopter.
  - (i) If there is a crack in an attachment support, replace the attachment support.
- (ii) If there is a crack in the fairing, replace the IGB fairing with IBG fairing P/N 332A24-0322-00 in accordance with the Accomplishment Instructions, paragraph 3.B.2,

of Airbus Helicopters Service Bulletin No. AS332-53.01.78, Revision 0, dated March 9, 2015 (SB No. AS332-53.01.78) or Service Bulletin No. EC225-53-041, Revision 0, dated March 9, 2015 (SB No. EC225-53-041), as appropriate for your model helicopter.

- (2) For helicopters with IGB fairing P/N 332A24-0303-05XX or P/N 332A24-0303-06XX, within 15 hours TIS and thereafter at intervals not to exceed 15 hours TIS, visually inspect for a crack in the fairing gutter as shown in Figure 1 of EASB No. 53.01.47 or EASB No. 53A001. If there is a crack in the fairing gutter:
- (i) Inspect for interference and separation of the fairing gutter. If there is any interference between the gutter and the tail rotor inclined drive shaft tube, replace the tail rotor inclined drive shaft tube. If there is any interference between the gutter and a hydraulic pipe, repair or replace the hydraulic pipe. If there is any interference between the gutter and the flight controls, repair the flight controls in accordance with FAA-approved procedures. If there is any separation of the gutter, remove the gutter.
- (ii) Replace the IGB fairing with IBG fairing P/N 332A24-0322-00 in accordance with the Accomplishment Instructions, paragraph 3.B.2, of SB No. AS332-53.01.78 or SB No. EC225-53-041.
- (3) Within 150 hours TIS, replace the IGB fairing P/N 332A24-0303-05XX, 332A24-0303-06XX, 332A08-1391-00, or 332A08-1391-01 with IGB fairing P/N 332A24-0322-00 in accordance with the Accomplishment Instructions, paragraph 3.B.2, of SB No. AS332-53.01.78 or SB No. EC225-53-041.
- (4) Replacing the IGB fairing with IGB fairing P/N 332A24-0322-00 is terminating action for the repetitive inspections required by this AD.

(5) Do not install an IGB fairing P/N 332A24-0303-05XX, P/N 332A24-0303-06XX, P/N 332A08-1391-00, or P/N 332A08-1391-01 on any helicopter.

### (f) Credit for Actions Previously Completed

Compliance with Airbus Helicopters Emergency Alert Service Bulletin No. 53.01.47, Revision 4, dated September 27, 2011, before the effective date of this AD is considered acceptable for compliance with the initial inspections specified in paragraphs (e)(1) and (e)(2) of this AD, but does not constitute terminating action for the repetitive inspections required by this AD.

### (g) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5116; email 9-ASW-FTW-AMOC-Requests@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

# (h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2015-0092, dated May 26, 2015. You may view the EASA AD on the Internet at http://www.regulations.gov in the AD Docket.

# (i) Subject

Joint Aircraft Service Component (JASC) Code: 5350 Aerodynamic Fairings.

Issued in Fort Worth, Texas, on December 21, 2016.

Lance T. Gant,

Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2016-31866 Filed: 1/4/2017 8:45 am; Publication Date: 1/5/2017]